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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|---|-------------------------------|----------------------|---------------------|------------------|--|
| 10/518,034 | 12/14/2004 | Garfield P. Royer | 1729-33 | 5418 | |
| 23117 NIXON & VA | 7590 06/19/200 NDERHYE, PC | EXAM | EXAMINER | | |
| 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203 | | | SHEIKH, HUMERA N | | |
| | | | ART UNIT | PAPER NUMBER | |
| | | 1618 | | | |
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| | | | MAIL DATE | DELIVERY MODE | |
| | | | 06/19/2008 | PAPER | |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Application No. Applicant(s) 10/518,034 ROYER, GARFIELD P. Examiner Art Unit Humera N. Sheikh 1618 The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Reply

| _ | LAUIIIIICI | ALC OILL | | | | | |
|---|---|--|---------|--|--|--|--|
| | Humera N. Sheikh | 1618 | | | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address | | | | | | | |
| Period for Reply | | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPL. WHICHEVER IS LONGER, FROM THE MAILING D. - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (9) MONITY is from the mailing date of the communication. - Failure to reply within the safe or extended period or reply will by statute. Any reply received by the Office siter than there months after the mailing earned guarte term adjustment, See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | N. nely filed the mailing date of this o D (35 U.S.C. § 133). | | | | | |
| Status | | | | | | | |
| 1) Responsive to communication(s) filed on 14 De | ecember 2004. | | | | | | |
| ·- · · · · · · · · · · · · · · · · · · | | | | | | | |
| ·— | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | | |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | | | |
| Disposition of Claims | | | | | | | |
| 4)⊠ Claim(s) <u>1-68</u> is/are pending in the application. | | | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | | |
| 6) Claim(s) is/are rejected. | ·= ··- | | | | | | |
| 7) Claim(s) is/are objected to. | ·- · · · · · · · · · · · · · · · · · · | | | | | | |
| ·= ·· · |)☑ Claim(s) <u>1-68</u> are subject to restriction and/or election requirement. | | | | | | |
| 5/25 S.a.m.(5) <u>- 55</u> and 5 and 50 and 10 an | | | | | | | |
| Application Papers | | | | | | | |
| 9)☐ The specification is objected to by the Examiner. | | | | | | | |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. | | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | | |
| 11)☐ The oath or declaration is objected to by the Ex | aminer. Note the attached Office | Action or form P | ГО-152. | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | | |
| 12) Acknowledgment is made of a claim for foreign | priority under 35 U.S.C. § 119(a) | -(d) or (f). | | | | | |
| a) All b) Some * c) None of: | | | | | | | |
| 1. Certified copies of the priority documents have been received. | | | | | | | |
| Certified copies of the priority documents have been received in Application No | | | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage | | | | | | | |
| application from the International Bureau | ı (PCT Rule 17.2(a)). | | | | | | |
| * See the attached detailed Office action for a list | of the certified copies not receive | d. | | | | | |
| | | | | | | | |
| | | | | | | | |
| II | | | | | | | |
| Attachment(s) | A) [] Interview 0: | (DTO 440) | | | | | |
| Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) | 4) Interview Summary Paper No(s)/Mail Da | | | | | | |

| Attachment(s) | |
|---|--|
| 1) Notice of References Cited (PTO-892) Notice of Draftsperson's Patient Drawing Review (PTO-948) Information-Disclosure-Statement(e)-(PTO/SE/D8) Paper No(s)Mail Date Pager No(s)Mail Date | 4) Interview Summary (PTO-413) Paper No(s)Mail Date. 5. Notice of Informal Patent Application 6) Other: |
| S. Patent and Trademark Office | |

Art Unit: 1618

DETAILED ACTION

Status of the Application

Claims 1-68 are pending in this action. Claims 1-68 are subject to a Restriction/Election requirement.

Election/Restrictions

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-12 and 19-41, drawn to a composition for the controlled release of an antineoplastic agent and an immunostimulant.

Group II, claim(s) 13-18 and 42-58, drawn to a composition for the controlled release of a radiation potentiator.

Group III, claim(s) 59-68, drawn to a method of treating a tumor in a mammal (ex vivo).

The inventions listed as Groups I-III do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: The common technical feature that is missing between the groups is the use of the same active ingredients (i.e., antineoplastic agent), inorganic compound and treatment conditions (i.e., ex vivo).

Election of Species (required if Applicant chooses to elect Group I):

This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The species are as follows:

Art Unit: 1618

(1) Election of Antineoplastic Agent:

- (a) paclitaxel
- (b) doxorubicin
- (c) cisplatin
- (d) ifosfamide
- (e) cytoxan
- (f) carboplatin
- (g)methotrexate
- (h) leuprolide
- (i) bleomycin
- (j) 5-fluorouracil (5-FU)

Applicant is required, in reply to this action, to elect a single species to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

The claims are deemed to correspond to the species listed above in the following manner:

Art Unit: 1618

Claim 5 corresponds to species (a)–(j).

The following claim(s) are generic: Claim 1.

The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons: Each species of active agent is capable of imparting different or unique physiologically and/or chemical effects to treat different conditions or diseases.

Election of Species (required if Applicant chooses to elect Group I):

This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The species are as follows:

(2) Election of Administration:

(a) injecting intra-tumorally or peri-tumorally

(b) injecting into tumor vasculature

(c) injecting into a cavity left by tumor resection

Applicant is required, in reply to this action, to elect a single species to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Art Unit: 1618

Upon the allowance of a generic claim, applicant will be entitled to consideration of

claims to additional species which are written in dependent form or otherwise include all the

limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after

the election, applicant must indicate which are readable upon the elected species. MPEP

§ 809.02(a).

The claims are deemed to correspond to the species listed above in the following manner:

Claims 20-22 corresponds to species (a)-(c).

The following claim(s) are generic: Claim 19.

The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons: Each species of administration forms is directed to injection in different locations of the tumors to yield different results.

Election of Species (required if Applicant chooses to elect Group I):

This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The species are as follows:

(3) Election of Immunostimulant:

(a) IL-2

(b) GM-CSF

Applicant is required, in reply to this action, to elect a single species to which the claims

shall be restricted if no generic claim is finally held to be allowable. The reply must also identify

the claims readable on the elected species, including any claims subsequently added. An

argument that a claim is allowable or that all claims are generic is considered non-responsive

unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of

claims to additional species which are written in dependent form or otherwise include all the

limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after

the election, applicant must indicate which are readable upon the elected species. MPEP

§ 809.02(a).

The claims are deemed to correspond to the species listed above in the following manner:

Claims 27-28 corresponds to species (a) and (b).

The following claim(s) are generic: Claim 19.

The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons: Each species of active agent is capable of imparting different

or unique physiologically and/or chemical effects to treat different conditions or diseases.

Election of Species (required if Applicant chooses to elect Group I):

This application contains claims directed to more than one species of the generic

invention. These species are deemed to lack unity of invention because they are not so linked as

to form a single general inventive concept under PCT Rule 13.1.

The species are as follows:

Art Unit: 1618

(4) Election of Administration Form:

(a) injection

(b) cannula or endoscope

Applicant is required, in reply to this action, to elect a single species to which the claims

shall be restricted if no generic claim is finally held to be allowable. The reply must also identify

the claims readable on the elected species, including any claims subsequently added. An

argument that a claim is allowable or that all claims are generic is considered non-responsive

unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of

claims to additional species which are written in dependent form or otherwise include all the

limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after

the election, applicant must indicate which are readable upon the elected species. MPEP

§ 809.02(a).

The claims are deemed to correspond to the species listed above in the following manner:

Claims 35-36 corresponds to species (a) and (b).

The following claim(s) are generic: Claim 19.

The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons: Each species of administration form is carried out using

different means, methods and/or steps, which can yield different results or effects, dependent on

the particular administration form employed.

Art Unit: 1618

Election of Species (required if Applicant chooses to elect Group II):

This application contains claims directed to more than one species of the generic

invention. These species are deemed to lack unity of invention because they are not so linked as

to form a single general inventive concept under PCT Rule 13.1.

The species are as follows:

(1) Election of Administration:

(a) injecting intra-tumorally or peri-tumorally

(b) injecting into tumor vasculature

(c) injecting into a cavity left by tumor resection

Applicant is required, in reply to this action, to elect a single species to which the claims

shall be restricted if no generic claim is finally held to be allowable. The reply must also identify

the claims readable on the elected species, including any claims subsequently added. An

argument that a claim is allowable or that all claims are generic is considered non-responsive

unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of

claims to additional species which are written in dependent form or otherwise include all the

limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after

the election, applicant must indicate which are readable upon the elected species. MPEP

§ 809.02(a).

The claims are deemed to correspond to the species listed above in the following manner:

Claims 43-45 corresponds to species (a)-(c).

The following claim(s) are generic: Claim 42.

Art Unit: 1618

The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons: Each species of administration forms is directed to injection in different locations of the tumors to yield different results.

Election of Species (required if Applicant chooses to elect Group II):

This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The species are as follows:

(2) Election of Radiation Potentiator:

(a) paclitaxel

(b) metronidazole

Applicant is required, in reply to this action, to elect a single species to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Art Unit: 1618

The claims are deemed to correspond to the species listed above in the following manner:

Claims 48-49 corresponds to species (a) and (b).

The following claim(s) are generic: Claim 42.

The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons: Each species of active agent is capable of imparting different or unique physiologically and/or chemical effects to treat different conditions or diseases.

Election of Species (required if Applicant chooses to elect Group II):

This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The species are as follows:

(3) Election of Administration Form:

(a) injection

(b) cannula or endoscope

Applicant is required, in reply to this action, to elect a single species to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Application/Control Number: 10/518,034

Art Unit: 1618

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP \$ 809.02(a).

The claims are deemed to correspond to the species listed above in the following manner:

Claims 54-55 corresponds to species (a) and (b).

The following claim(s) are generic: Claim 42.

The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons: Each species of administration form is carried out using different means, methods and/or steps, which can yield different results or effects, dependent on the particular administration form employed.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement may be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To preserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Because the above restriction/election is complex, a telephone call to applicants to request an oral election was not made. See MPEP 812.01.

Art Unit: 1618

Correspondence

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Humera N. Sheikh whose telephone number is (571) 272-0604.

The examiner can normally be reached on Mon, Tues, Thurs, Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Michael Hartley can be reached on (571) 272-0616. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

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may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

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like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Humera N. Sheikh/ Primary Examiner, Art Unit 1618

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June 17, 2008